Material Safety Data Sheet

WHMIS	TDG Road/Rail

Health Hazard	*	2
Fire Hazard		0
Reactivity		0
Personal Protection		B

This MSDS is providen as information only. The product is not WHIMS regulated. The product is regulated under the PCP act and packaged as a consumer product.

1. Product and company identification

Product name : **PREVENT 10**

Code : 30-60030

Date of issue (dd/mm/yyyy) : **2012-10-16.**

Material uses : Consumer products: Controls algae in swimming pool waters.

Supplier : Alliance Trading inc.
109 north Park Blvd 4th floor
Covington, LA, USA, 70433

Manufacturer : Manufactured for:
Alliance Trading inc.
109 north Park Blvd 4th floor
Covington, LA, USA, 70433

In case of emergency : **Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)**

2. Hazards identification

Potential hazards described in this section are not expected when manufacturer's direction for use and proper security measures are observed.

Physical state : Liquid. [Transparent liquid]

Odor : Characteristic.

Emergency overview : **CAUTION!**

May be harmful if swallowed. Moderately irritating to eyes. Slightly irritating to the skin and respiratory system. Do not ingest. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of entry : Eye contact. Ingestion.

Potential acute health effects

Inhalation : Slightly irritating to the respiratory system.

Ingestion : Harmful if swallowed.

Skin : Slightly irritating to the skin.

Eyes : Moderately irritating to eyes.

See toxicological information (Section 11) for more details.

3. Composition/information on ingredients

Name	CAS number	% (w/w)
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	10 - 30
ethanol	64-17-5	1 - 5
methanol	67-56-1	0 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

5. Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
:

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m³	Other	ppm	mg/m³	Other	ppm	mg/m³	Other	Notations
ethanol	US ACGIH 3/2012	-	-	-	1000	-	-	-	-	-	
	AB 4/2009	1000	1880	-	-	-	-	-	-	-	
	BC 9/2011	-	-	-	1000	-	-	-	-	-	
	ON 7/2010	-	-	-	1000	-	-	-	-	-	
	QC 9/2011	1000	1880	-	-	-	-	-	-	-	
methanol	US ACGIH 3/2012	200	262	-	250	328	-	-	-	-	[1]
	AB 4/2009	200	262	-	250	328	-	-	-	-	[1]
	BC 9/2011	200	-	-	250	-	-	-	-	-	[1]
	ON 7/2010	200	262	-	250	328	-	-	-	-	[1]
	QC 9/2011	200	262	-	250	328	-	-	-	-	[1]
[1]Absorbed through skin.											

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required. No monitoring equipment are required if no occupationnal exposure limit values are suggested.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Personal protection

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: No special resporatory protection equipment suggested under normal use conditions.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. < 1 hour (breakthrough time): Chemical-resistant, impervious gloves

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: Safety Glasses

8. Exposure controls/personal protection

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Recommended: No special equipment required

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

9. Physical and chemical properties

Physical state	: Liquid. [Transparent liquid]	**Molecular formula**	: Not applicable.	**Flammable limits**	: Not available.
Color	: Blue. [Dark]	**Molecular weight**	: Not applicable.	**Burning rate**	: Not applicable.
Odor	: Characteristic.	**Vapor pressure**	: Not available.	**Burning time**	: Not applicable.
Relative density	: 0.992	**Vapor density**	: Not available.	**Critical temperature**	: Not available.
pH	: 7.8	**Volatility**	: Not available.	**Auto-ignition temperature**	: Not available.
Viscosity	: Not available.	**Evaporation rate**	: Not available.	**Flash point**	: [Product does not sustain combustion.]
Odor threshold	: Not available.	**Ionicity (in water)**	: Cationic.	**Dispersibility properties**	: Not available.

Solubility : Easily soluble in the following materials: cold water and hot water.

Melting/freezing point : Not available.

Boiling/condensation point : Not available.

10. Stability and reactivity

Chemical stability : The product is stable.
Conditions to avoid : No specific data.
Materials to avoid : No specific data.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

The symptoms, hazards and situations described in this section are not expected when manufacturer's direction for use, proper security measures and given professionnal exposure limits are correctly followed.

Potential chronic health effects

Chronic effects :
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.
Target organs : Contains material which may cause damage to the following organs:lungs, upper respiratory tract, skin, eyes, throat.

Over-exposure signs/symptoms

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing
Ingestion : No specific data.
Skin : Adverse symptoms may include the following:
irritation
redness
Eyes : Adverse symptoms may include the following:
irritation
watering
redness

Medical conditions aggravated by over-exposure :
Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	LD50 Oral	Rat	426 mg/kg	-
ethanol	LC50 Inhalation Vapor	Mouse	>60000 mg/l	1 hours
	LC50 Inhalation Vapor	Rat	124700 mg/m³	4 hours
	LD50 Dermal	Rabbit	>20000 mg/kg	-
	LD50 Oral	Mouse	8300 mg/kg	-
	LD50 Oral	Rat	7 g/kg	-
	LD50 Oral	Rat	15010 mg/kg	-
methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation

11. Toxicological information

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	Skin - Severe irritant	Rabbit	-	25 milligrams	-
ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	0.066666667 minutes 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Eyes - Severe irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	400 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

12. Ecological information

Ecotoxicity : Readily biodegradable

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Exposure	Species
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	-	Acute EC50 670 µg/l Fresh water	96 hours	Algae - Green algae - Chlorella pyrenoidosa - Exponential growth phase
	-	Acute EC50 5.9 ppb Fresh water	48 hours	Daphnia - Water flea - Daphnia magna
	-	Acute LC50 0.28 ppm Fresh water	96 hours	Fish - Fathead minnow - Pimephales promelas
ethanol	-	Acute EC50 17.921 mg/l Marine water	96 hours	Algae - Green algae - Ulva pertusa
	-	Acute EC50 2000 µg/l Fresh water	48 hours	Daphnia - Water flea - Daphnia magna
	-	Acute LC50 25500 µg/l Marine water	48 hours	Crustaceans - Brine shrimp - Artemia franchiscana - Larvae
	-	Acute LC50 42000 µg/l Fresh water	4 days	Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss
	-	Chronic NOEC 4.995 mg/l Marine water	96 hours	Algae - Green algae - Ulva pertusa
	-	Chronic NOEC 0.375 ul/L Fresh water	12 weeks	Fish - Eastern mosquitofish - Gambusia holbrooki - Larvae
methanol	-	Acute EC50 16.912 mg/l Marine water	96 hours	Algae - Green algae - Ulva pertusa
	-	Acute LC50 2500000 µg/l Marine water	48 hours	Crustaceans - Common shrimp, sand shrimp - Crangon crangon - Adult
	-	Acute LC50 3289 mg/l Fresh water	48 hours	Daphnia - Water flea - Daphnia magna - Neonate
	-	Acute LC50 290 mg/l Fresh water	96 hours	Fish - Zebra danio - Danio rerio - Egg
	-	Chronic NOEC 9.96 mg/l Marine water	96 hours	Algae - Green algae - Ulva pertusa

Bioconcentration factor : Not available.

Toxicity of the products of biodegradation : The products of biodegradation are as toxic as the original product.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste stream : Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-

PG* : Packing group

15. Regulatory information

United States inventory (TSCA 8b) : All components are listed or exempted.
WHMIS (Canada) : Not controlled under WHMIS (Canada).
Canadian lists : **CEPA Toxic substances**: None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.
Canada inventory : At least one component is not listed.
Other certification :

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information on the product

Label requirements : MAY BE HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

Date of printing (YYYY-MM-DD) : 2012-10-16.
Date of issue (YYYY-MM-DD) : **2012-10-16.**

Note: MSDS are valid for a 3 years period after the date of issue

Indicates information that has changed from previously issued version.

MSDS prepared by:
QA and Documentation Department
Manufactured for:
Alliance Trading inc.
109 north Park Blvd 4th floor
Covington, LA, USA, 70433

Notice to reader

There are potential hazards to people and goods associated with the use of this product which are detailed in the present Material Safety Data Sheet (MSDS). To minimize potential hazards associated with this product it is of users responsibility to conform the directions for use and all other instructions provided in the Material Safety Data Sheet (MSDS) of this product. The manufacturer, distributors and suppliers of this product are exonerating themselves and consequently shall not be liable for any prejudice or damage of any kind, resulting from the use of this product which may not be in accordance with the directions for use or all the instructions provided in the present Material Safety Data Sheet (MSDS) or resulting from an unadvised use of the present product..

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)